

# Financial Decentralization Reflected in the Revenues and Expenses of Local Budgets in Romania

Gheorghe MATEI<sup>1</sup>, Olivia MANOLE<sup>2</sup>

<sup>1,2</sup>University of Craiova, Faculty of Economics and Business Administration  
ghematei@yahoo.com

**Abstract.** *Decentralization process, due to its inter-sectoral feature, is a very difficult process and requires constant coordination between the actors involved, as well as the undertaking by them, including by the recipients (local public administration authorities), of the measures agreed on. Thus, for this process to be successfully implemented, the transfer of administrative responsibilities must be correlated with that of the financial resources.*

**Keywords:** financial decentralization; local revenues; local expenses; economic model of unifactorial regression

**JEL Classification:** H72, C58

## 1. Introduction

Although at first glance it is perceived as an opaque and inflexible system, local public administration directly influences all other state institutions and the private sector. Therefore, reform in this area is not only a trend that is already visible at the European level, but also a necessity in order to obtain performance nationally.

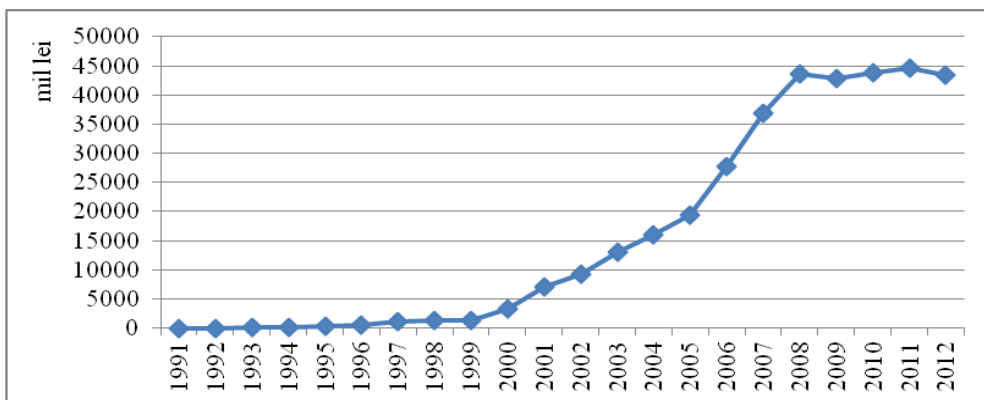
By financial decentralization, local authorities are vested with the right to establish and administer some duties and taxes to provide the financial resources necessary for covering the expenses from local budgets. Also, decentralization of activities and services can improve the supply of public services, increase the efficiency by tracking the correlation between local actions and necessary expenses.

To follow the progress of decentralization, local revenues and expenditures of centralized local budgets at national level are considered. For this purpose an annual analysis was performed on the data collected from budget executions taken from the Ministry of Public Finance for a period of 22 years (1991-2012).

## 2. Evolution of local budget revenues centralized at the country level

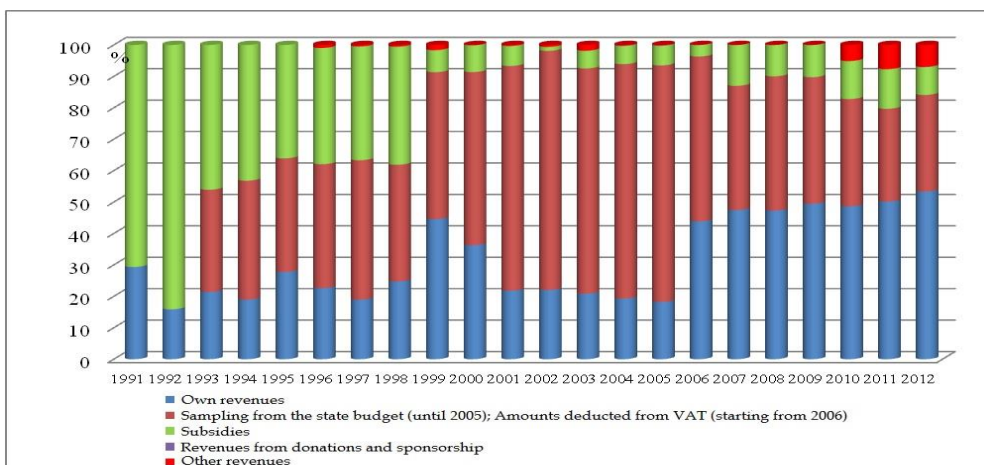
Categories of revenues of local budgets have evolved and changed from 1991 until 2012, as can be seen in figures 1, 2, 3 and 4.

During 1991 - 2012, revenues of local budgets at the national level have a positive development (see Figure no.1) from year to year (average annual increase of 2,069 thousand lei) from 5.86 million lei in 1991 to 43,453 million lei in 2012 (increase by 43,447 million lei in 2012 compared to 1991). This increase is largely due to the positive development of subsidies until 1998, with weights of up to 84.17% of total revenues. From 1999 to 2005, withdrawals from the state budget have a significant contribution (up to 76.11% in 2002) to the increase of total revenues of local budgets centralized at national level, and from 2006 until 2012 the important contribution to the increase of total revenues is held by own revenues (weights up to 53.37%), as it results from Figure no.2.



**Fig. no. 1: - Evolution of total local budget revenues centralized at the country level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)



**Fig. no. 2: - Structure of local budget revenues centralized at the country level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

From 1991 to 1995, revenues from subsidies have the highest weight in total income, with values ranging from 84.17% in 1992 and 36.07% in 1995 (year which marks the highest degree of financial centralization, local budgets relying heavily on government transfers) after which, since 1996, this weight has a decreasing trend, reaching 8.82% in 2012 when decentralization reaches the highest level. The weight of income from withdrawals from the state budget in total revenue in the period 1992-2005, has an upward trend, while in the period 1995-2005, this weight is significantly higher compared to other types of income ( $p = 0.000616 < \text{significance threshold} = 0.05$  - Student test). In 2006, year in which there is a significant jump in tax revenue due to the presence of significant amounts from income taxes, quotas deducted from income tax and the amounts deducted from VAT which were transferred from the state budget, local budgets, and which have been included as income tax, not separately registered, the weight of the amounts deducted from VAT has the highest value. Own revenues prevail since 2007, with 47.47% weight until the end of the analyzed period, when the weight of total income reaches 53.37%, which means that the capacity of

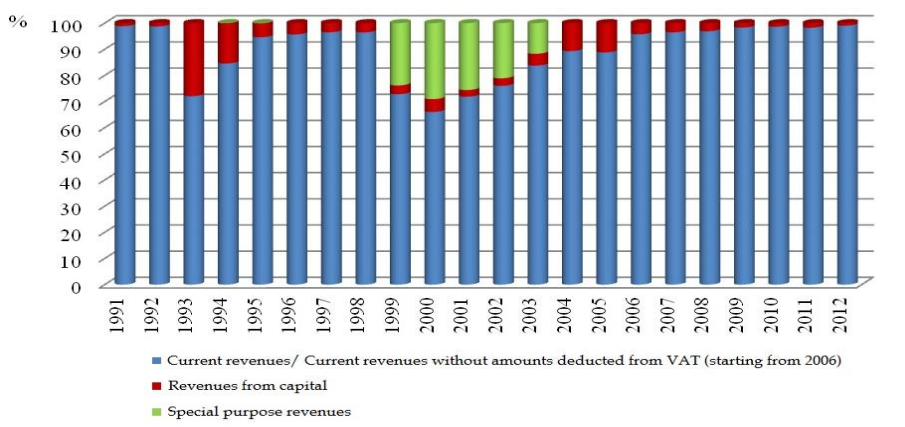
self-financing has increased along with the decentralization of public services, especially the management of hospitals in 2010.

Revenues from donations and sponsorships occur only during 1996-1998 (with weight of total income of 0.01%) and in 2004-2005 (with weight of total income of 0.12%).

Own revenues from local budgets centralized at the country level consist in the largest part of current revenues. Throughout the analyzed period, 1991-2012, the weight of current revenues in own revenues have values of over 66% and reaches 99.02%. The weight of current revenues record low values (below 80%) in 1993 (72.07%) and in 1999-2002 (72.83% and 76.04%, respectively). From 2009 and until the end of the analyzed period, the weight of current revenues is over 98% (in 2009 of 98.29%, 99.02% in 2012, respectively).

The weight of capital revenues in own revenues has the highest value in 1993 when it is 27.93%, followed by 1994 with a value of 15.4% and 2004-2005 (10.69% and 11.21%, respectively), during the rest of the period under review the weight of these types of revenues does not exceed 5%. In 2012, the weight of capital revenues in own revenues is of 0.98%, the lowest value of the entire period analyzed.

Special purpose revenues have a higher weight in the period 1999-2003 (23.8% in 1999 and 11.7% in 2003 respectively) with the highest value 29.03% in 2000. These revenues arise within budget since 1999.



**Fig. no. 3: - Structure of own revenues from local budgets centralized at the country level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

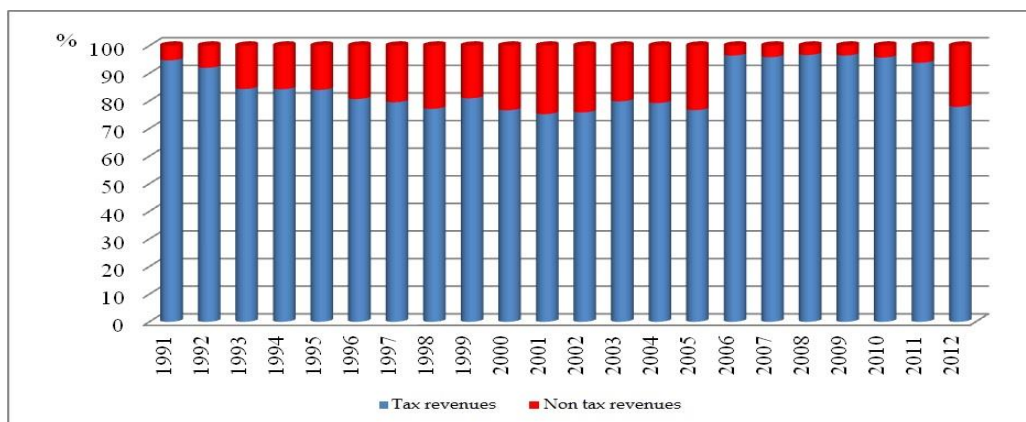
Throughout the analyzed period, 1991-2012, tax revenues have the highest weight in current revenues. Tax revenues (local taxes and duties) are relevant to the degree of decentralization as they represent the main source of revenues of local budgets, due to the following characteristics:

- they have a high degree of independence in regard to central administrations;
- they constitute reliable sources of revenue for local budgets;
- they are characterized by increased fiscal efficiency;
- they create a tight relation of reciprocity between tax payers and authorities given their use for financing local public services.

From 1991 to 2005, as it results from Figure no.4, the weight of tax revenues

starts from 94.71% and decreases to 76.67% (it decreases by 18.04 percentage points). In 2006, the weight of current revenues rises sharply to 96.43% due to the reduction of non-tax revenue contribution to the formation of current revenues and as a result of the adoption of the decentralization law<sup>1</sup>, then by 2012 this weight drops to 77.88% due to the negative effects the economic crisis that has considerably decreased the average revenues per capita.

The weight of non-tax revenues in current revenues is below 25% in all the 22 years studied. In the period 1991-2005, the weight of these revenues has an upward trend, increasing from 5.29% in 1991 to 23.33% in 2005. After 2006 and until 2011, the share of non-tax revenues in current revenues decreased significantly below 6%. In 2012 the weight of non-tax revenues increased to 22.12% of current revenues due to increased disbursements from the budgets of public institutions (increase by 15.96 percentage points in regard to the previous year).



**Fig. no. 4: - Structure of current revenues from local budgets centralized at the country level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

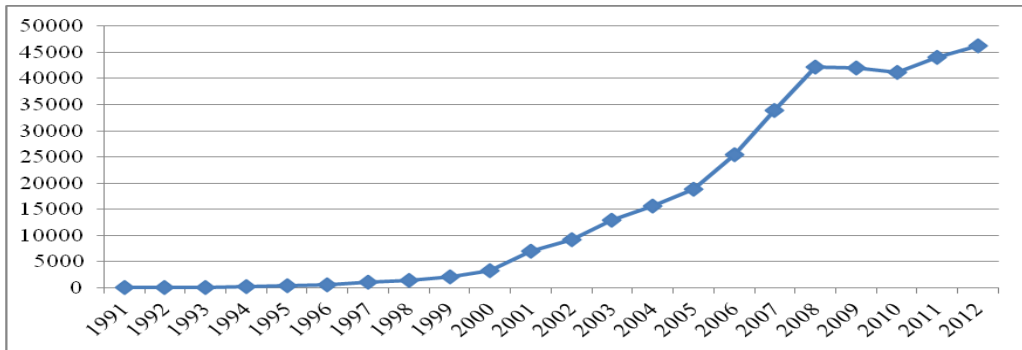
### 3. Evolution of the structure of local budget expenses centralized at the country level

Local budgets include, in addition to revenues, the expenses. These latter are determined by the competences given to the authorities of local public administration. The fulfillment of competences imposes to local public authorities to undertake several categories of expenses, of which: staff costs, material costs, costs of purchased services, to subsidize activities, for education, health, transport, culture, social services. The evolution of various categories of expenses provided in centralized local budgets at the country level is shown in Figures 5, 6 and 7 .

According to Figure no.5 total expenses of local budgets centralized at the national level in the analyzed period have an upward trend (average annual increase by 2206.05 million lei) from 5.85 million lei in 1991 to 46333 million lei in 2012 (total expenses increase in 2012 compared to 1991 by 46327.15 million lei). As one may notice from Figure no.6 the increase in these expenses is determined in the first part of the analyzed period 1991-2000, by the positive development of public development ser-

<sup>1</sup> Law no. 195/2006 for administrative and fiscal decentralization, published in M.Of. Part I no. 453 from 25.05.2006.

ices expenses, which have a weight of up to 58.8% of total expenses of local budgets centralized at the national level, and from 2001 by the positive development of social-cultural expenses that have contributions of up to 53.46% to the formation of total expenses.

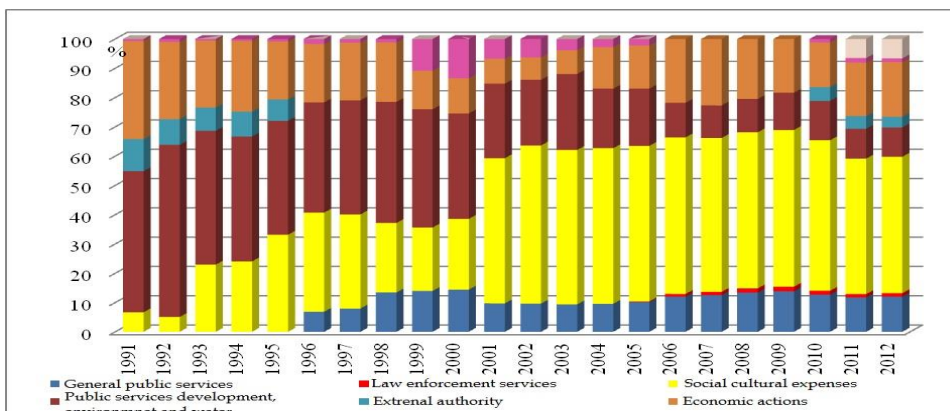


**Fig. no. 5: - Evolution of the structure of local budget expenses centralized at the country level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

From 1991 to 2000, the expenses for public services development, environment and water prevail in local budget expenses at the country level, with weights in total expenses of 48.2% in 1991 and 36.02% in 2000. The highest contribution of public expenses on public development services for the formation of budget expenses is of 58.8% in 1992. After 2001, the weight of public services development expenses is now the second (25.44% in 2001 and 19.56% in 2005 respectively) in favor of social-cultural expenses (49.58% in 2001, 46.58% in 2012 respectively) and the third in 2006 (11.81% in 2006 and 10.02% in 2012 respectively), a place taken by the expenses of economic activities (21.8% in 2006 and 18.69% in 2012 respectively).

Since 2005, expenses for law enforcement services also appear in the structure of budget expenses. In the period 2005-2012, the increase of state investment in law enforcement services determines the increase of the contribution of these expenses to the formation of budget expenses (from 0.24% in 2005 to 1.2% in 2012 – it increases five times in 2012 compared to 2005).



**Fig. no. 6. Structure of local budget expenses centralized at the country level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

Local expenses for culture and art prevail only in 1991 and 1992 when there were also social services costs (culture and arts: 87.18% and 84.16% respectively; social services 12.82% and 15.84% respectively).

Local governments are interested in health between 1993-1997 when the highest expenses are made (63.56% and 39.76% respectively). During 1992-2012, the weight of health expenses is coming down in 2012 to 4.58% of the expenses allocated to social cultural actions.

From 2001 until the end of the analyzed period, a major importance is allocated to education, so that the weight of expenses on education in social-cultural expenses is significantly higher compared to other activities ( $p = 7.16 \text{ E-}11 < \text{significance threshold} = 0.05$  - Student test). The weight of expenses on education in social and cultural expenses is decreasing from 73.55% in 2001 to 49.59% in 2012.

Since 2001 new services are decentralized and are the responsibility of local authorities: school education (personnel costs, grants, inventory items) and the minimum wage increases.

In 2002 culture, religion units, museums, home heating assistance have also been transferred to local authorities, and in 2003 the payment of the rights for disabled people is also transferred (sources are provided by the National Authority for Disabled People).

In 2005 local civil registry offices and community police are also transferred to local authorities but without funding sources which occur from 2006.

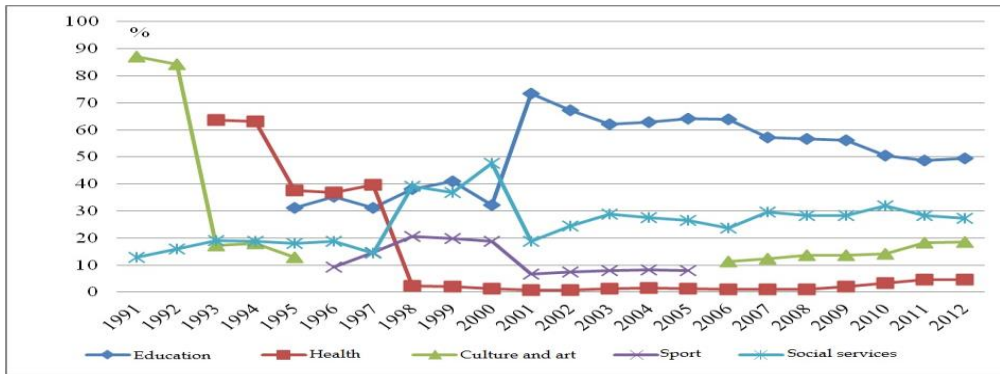
Recently, local expenses on social and cultural actions have been determined also by legislative developments in the period 2009-2011. "In 2010, by O.U.G. No. 48/2010, 374<sup>2</sup> public hospitals were decentralized, most to the counties and municipalities. Local authorities co-finance part of the investment, repairing and endowment costs. From the perspective of the principles and rules of decentralization, the transfer of hospitals to such a narrow administrative level is not recommended because they are required to fund services for non-residents who do not contribute to the duties and taxes of local budgets. Also in 2010, the local police replaced the community police, but funding remained the same, the costs of establishing and operating being covered by the local budget. Social services are one of the most difficult competences for local governments chosen, captive between the tendency to please the voters and that of not wasting scarce resources of local budget on welfare payments. The most important change of welfare payment regime concerns its payment, which was never carried out by the local budget, but by county agencies. Moreover, welfare grant was conditioned by the payment up to date of local taxes and duties, including fines, by the beneficiaries. In the year 2011 important news were brought regarding the responsibilities of local governments in the organization, operation and financing of education units<sup>3</sup>, on decentralization of competences. Core funding for accredited state, private and confessional pre-university units was provided from the state budget, based on cost standards per student. Other expenses, respectively complementary and supplementary funding, were provided in a combined manner from the state budget and local budgets without any report made clear."<sup>4</sup>

---

<sup>2</sup> O.U.G. no. 48/2010 for the amending and supplementing certain acts in the field of health for decentralization, published in M.Of., Part I, no.384 from 10.06.2010

<sup>3</sup> Law no.1/2011 of national education, published in M.Of. no.18 from 10.01.2011

<sup>4</sup> Agenda of the Communes in Romania -2012, Orizonturi 2020, 2<sup>nd</sup> Edition, pp. 15-18, www.acor.ro, accessed on 13.03.2013



**Fig. no. 7: - Evolution of social-cultural expenses from centralized local budgets**  
Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

#### 4. Patterns and practices for analyzing the correlation between local budget revenues and expenses centralized at national level

The analysis of revenues and expenses of local budgets centralized at national level is performed using time series indicators: absolute indicators, relative indicators and average indicators.

The structure of total revenues and total expenses on categories of revenues, on categories of expenses respectively is carried out with the help of statistic indicator, relative frequency:  $f_i = \frac{x_i}{\sum x_i}$

Stationary time nature of data series is analyzed using *Augmented Dickey Fuller* test made available by Eviews (**CODIRLAȘU A.**).

The analysis of the link between total revenues and total expenses of local budgets centralized at national level is performed using one-factor regression econometric model defined by the relation

$$y = f(x) + \varepsilon \Rightarrow y = a + b \cdot x + \varepsilon \Rightarrow \text{expenses} = a + b \cdot \text{revenues} + \varepsilon$$

where:

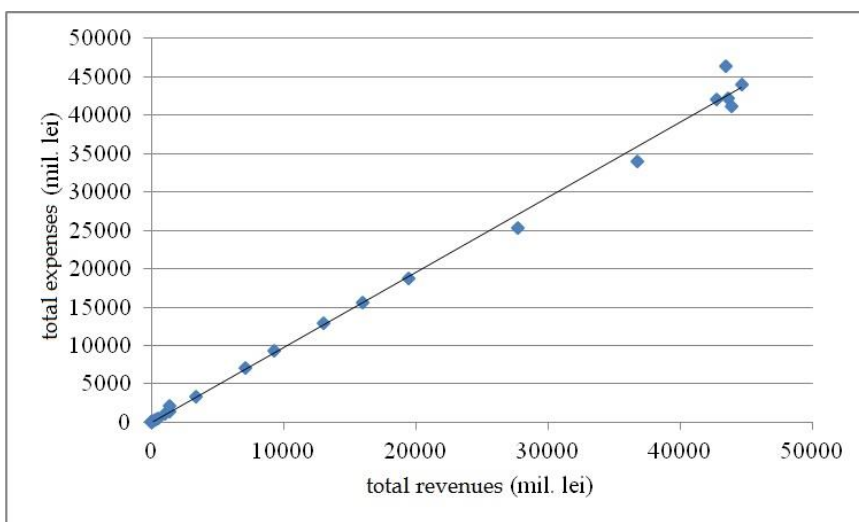
- y is the endogenous or dependent variable;
- x is the exogenous or independent variable;
- f(x) is the regression function with which the values of the variable y will be estimated;

- $\varepsilon$  is the random variable of the pattern which emphasizes the influence of other factors;

- expenses form the dependent variable;
- revenues form the independent variable;

The estimation of the parameters of econometric pattern is performed by using least square method (OLS).

The total revenues of local budgets centralized at national level form a stationary series in time if we accept a level of significance of 1% ( $t_{\text{Statistic}} = 4.02 \geq t_{\text{critical}} 1\% \text{ level} = 2.69$  and the probability associated with the test is 0.0004). Total expenses of local budgets centralized at national level also form a stationary series in time for the level of significance of 1% ( $t_{\text{Statistic}} = 3.67 \geq t_{\text{critical}} 1\% \text{ level} = 2.74$  and the probability associated with the test is 0.0013).



**Fig. no. 8: - Correlation between the revenues and expenses of local budgets centralized at national level**

Source: Budget executions, [www.mfinante.ro](http://www.mfinante.ro)

**Table no. 1 Estimation of the parameters of econometric pattern which describes the relation between total revenues and total expenses performed by using least square method (OLS) during 1991 – 2012**

<b>Dependent variable: expenses</b>					
<b>Least square method</b>					
No. of observations: 22					
<b>expenses = a + b*revenues</b>					
	<b>Value of estimators</b>	<b>Standard error</b>	<b>Calculated value of Student test</b> $t_{calculated}$	<b>Table value of Student test</b> $t_{0,05;20}$	<b>Probability</b>
<b>a</b>	16.38776	0.328066	9.049953	2.09	0.0096
<b>b</b>	0.975356	0.013692	71.23310		0.0000
<b>Determination coefficient</b>	0.996074	Average total expenses (mil lei)			15805,33
<b>Correlation ratio</b>	0.998035	F-statistic			5074.155
		$F_{0,05;1;20}$			4.35
<b>Durbin – Watson</b>	$d_{calc.}$	2,03	Probability		0.000000
	$d_L$	1,24			
	$d_U$	1,43			

Source: processing from Eviews program

After verifying the independence hypothesis of errors, the lack of error autocorrelation phenomenon is found (the values of random variable are independent of each other) because  $d_U=1,43 < d_{calc}=2,03 < 4-d_U=2,57$ .



The estimators of pattern parameters are significantly different from zero for a significance threshold of 5%. Consequently we have: estimator of  $a$  parameter is 16.38 with the value of Student test  $t_a = 9.04 \geq t_{0,05;20} = 2.09$  and  $p=0.0096 < \text{significance threshold} = 0.05$  and estimator of  $b$  parameter is 0.98 with the value of Student test  $t_b = 71,23 \geq t_{0,05;20} = 2.09$  and  $p=0 < \text{significance threshold} = 0.05$ , respectively.

The calculated value of F test is higher than the table value ( $F_{\text{calc}} = 5074.155 \geq F_{0,05;1;20} = 4.35$ ), which means that the pattern is significant and then total revenues are important influence variables of total expenses.

Based on the results of the estimation displayed by Eviews program, the following pattern results:

$$\text{expenses} = 16.39 + 0.98 * \text{revenues}$$

After the analysis of total revenues and total expenses of local budgets centralized at national level there is a positive development throughout the analyzed period. Revenue growth is largely due to the positive development of grants, from 1991 and until 1998, of state budget withdrawals from 1999 to 2005 and own revenues in recent years. The positive evolution of expenses for public development services in the period 1991 - 2000 significantly influences the increase of total expenses. Since 2001 and until the end of the analyzed period total expenses are influenced by social and cultural expenses.

The variation in total expenses is explained 99.6% by the variation in total revenues. Total revenues have an intense and positive influence on total expenses of local budgets centralized at national level.

There is a high intensity relation between revenues and expenditures of local budgets centralized at national level. The relationship between the two variables is straightforward, so total revenue growth with an increase of one million lei leads to the increase of total expenses by 0.98 million lei.

## 5. Conclusions

After the analysis of the evolution of the structure of revenues and expenses of local budgets centralized at the country level in 1991-2012, the following conclusion emerges: Romania is already a state with a high fiscal decentralization and autonomy. However, in reality one may notice a range of issues:

- a) own revenues (formed especially from local taxes and duties) are insufficient compared to the financial needs required for developing the activities;
- b) amounts deducted from the scatter income tax rates are insufficient, which means a weak economic activity and low concern for developing economic activities in the area;
- c) the amounts scattered from income tax and VAT represent an important source of income for many local budgets. These amounts have special destination in most cases, and local authorities can not dispose of the change of destination;
- d) in terms of expenses, they have diversified from year to year as a result of the decentralization process. Switching competences to local authorities was made and is often made in a hurry, without preparing in advance these authorities to take over those tasks. Most are operating expenses (personnel and material expenses) and very little are for investments which shows their poor development and failure to give quality services to the communities they represent. Financial decentralization involves a transfer of responsibilities with regard to expenses to subordinated local authorities, financed through a combination of own funds and other types of resources, including transfers. But in our country it seems that the delegation of certain responsibilities to the local level was not always followed by a transfer of financial resources to finance

these expenses;

e) the absorption of European funds is very limited compared to the existing potential.

As a general conclusion of the findings we can point out that there are still big problems at the level of local communities in terms of the stage of fiscal decentralization: there are insufficient funds for investments, and the dependence on central authority is still felt. All these aspects lead to the conclusion that in Romania we are dealing with a partial decentralization.

## References

*Agenda Comunelor din România (2012)*, Orizonturi 2020, Ediția a II-a, available at, [www.acor.ro](http://www.acor.ro), [Accessed on 13.08.2013].

Codrițașu A. (2007), *Econometrie aplicată utilizând E-views*, ASE, București.

Necșulescu C., (2012), *Econometrie*, Editura Universității din Pitești.

Popa, E.(1999), *Autonomia locală în România*, Editura All Beck, București.

Săvoiu Gh., Necșulescu C., (2009), *Econometrie*, Editura Universitară.

Șipoș C., Preda C., (2006), *Econometrie*, Editura Mirton, Timișoara.

Sona, C. (1997), *Problemele administrației locale în finanțele publice. Teorie și practică în tranziția central europeană*, Ars Longa.

Tabără, V.(2009), *Finanțele publice și controlul financiar în administrația publică locală*, Editura C.H. Beck,, București.

*Law no. 195/2006 of administrative and fiscal decentralization*, published in M.Of. Part I no. 453 from 25.05.2006.

*O.U.G .no.48/2010 for the amendment and completion of certain acts in the field of health for decentralization*, published in M.Of., Part I, no.384 from 10.06.2010.

*Law nr.1/2011 of national education*, published in M.Of. nr.18 from 10.01.2011 [www.mfinante.ro](http://www.mfinante.ro), [Accessed on 15.08.2013].